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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/887,429 | 06/25/2001 | Hilton Becker | 987-42 | 6994 |

7590 10/05/2004

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EXAMINER

DEMILLE, DANTON D

ART UNIT PAPER NUMBER

3764

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/887,429 | BECKER, HILTON | |
| | Examiner | Art Unit | |
| | Danton DeMille | 3764 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-4 is/are allowed.
- 6) ☒ Claim(s) 5, 6 and 8-11 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt et al.**

6,142,982.

3. Hunt teaches a method of treating wounds by selecting an area of the patient's skin in a wound area, subjecting the selected area of skin to a reduced pressure and pulsating the reduced pressure between periods of reduced pressure and periods of relaxation. Column 4, lines 17-33 teaches that when it is desired to apply intermittent suction to the wound site a pressure relief valve 8 enables the pressure to be brought to atmospheric pressure rapidly.

4. While Hunt may not specifically state that the skin is stretched during the process the fact that Hunt teaches all of the claimed method steps and applies a reduced pressure to the skin, the skin will be stretched at least to a certain extent and would appear to comprehend the claimed invention.

5. Hunt also may not state that the wound is the result of a surgical procedure. Hunt teaches a method of treating wounds regardless of their origin. The wounds could originate from trauma to the body or a surgical procedure such as skin grafts. The Hunt device and procedure does not distinguish from the two. It would have been obvious to one of ordinary skill in the art to modify

Hunt and use the device for wounds resulting from surgery such as skin grafts since the origin of the wound is immaterial to the treatment.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hunt et al. 6,142,982 in view of Howard 6,030,318.

7. Hunt appears silent with regard to the exact timing of the intermittent pressure treatment. Hunt suggests the apparatus can be programmed to relieve pressure at 10 minute intervals. Howard goes into more detail and gives example time periods dependent on the type of treatment desired. Cycle times vary from 2 seconds to 60 minutes. Clearly, one can vary the cycle time as desired to achieve the best results dependent on practical consideration of intended use for specific patients and specific wounds. It would have been obvious to one of ordinary skill in the art to modify Hunt and modify the cycle time to include at least one cycle per 5 minute period as suggested by Howard to find the optimum cycle time for a particular patient dependent on practical considerations of intended use.

8. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cooper 5,000,164 in view of Howard 6,030,318.

9. Cooper teaches an apparatus for increasing blood circulation in an injured body part by applying a variable pulsating vacuum device. The variable pulsation is based on the patient's variable heart systolic and diastolic pressure pulsations. Cooper teaches the device is intended for limbs including hands and feet and for parts of the body with injuries or illness that have impaired blood circulation.

10. Howard also teaches an apparatus for increasing blood circulation in limbs including the foot as shown in figures 2C, 2C'. Howard also teaches using the device for other parts of the

body with impaired blood circulation including areas of sores and wounds. It would have been obvious to one of ordinary skill in the art to modify Cooper to use the device for other parts of the body including sores and wounds that use a concave applicator as taught by Howard in order to apply therapy to local areas of the body.

11. Regarding claim 9, Cooper appears silent with regard to using a computer to control the complex process of detecting the patient's heart systolic and diastolic pressure pulsations and operating of the pressure modulator to be synchronized with these heart measurements however, using a computer to control such operations would have been well within the realm of the artisan of ordinary skill in order to simplify the process and allow for programming modifications. Howard teaches using a computer to control the operation of the variable pulsating vacuum device. It would have been obvious to one of ordinary skill in the art to further modify Cooper to use a computer as suggested by Howard to better control the operation of the pressure pulsations to be in synchronism with the heart rate.

12. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pennell et al. 5,156,839 in view of Lockwood et al. 6,685,681.

13. Pennell teaches column 12, lines 16-52, to inhibit scar formation studies have suggested that the use of autogeneous fat grafts have been used. The process of simple grafts would have included selecting a receptive site on the skin, selecting a donor site on the skin, making a puncture at the donor site and removing a mass of fat cells, inserting the mass of fat cells. The only difference would be the provision of drawing body fluids into the mass of fat cells by subjecting the area with suction.

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14. Lockwood teaches column 4, lines 40-45, the convention that providing vacuum therapy to wounds promote blood flow. It would have been obvious to one of ordinary skill in the art to modify Pennell to merely include vacuum therapy over the wound site as taught by Lockwood to increase blood flow to the area and promote faster healing.

Allowable Subject Matter


15. Claims 1-4 and 7 are allowable over prior art to which the examiner is aware.

ddd

1 October, 2004

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